To: Mitsakopoulos, Greg[mitsakopoulos.greg@epa.gov]; Downey, Shannon[downey.shannon@epa.gov]; Breslin, Colin[breslin.colin@epa.gov]; Lambesis, Christopher[Lambesis.Christopher@epa.gov]
Cc: Swan, Kathleen[swan.kathleen@epa.gov]; Awanya, Francis[awanya.francis@epa.gov]; Schupp, George[schupp.george@epa.gov]; Argentieri, Sabrina[argentieri.sabrina@epa.gov]; Kane, Eleanor[kane.eleanor@epa.gov]
From: Ramaly, Todd
Sent: Wed 11/6/2013 11:37:29 PM
Subject: RE: Veolia 1310005

Greg,

See below in RED.

Thanks.

Todd D. Ramaly

Environmental Scientist

RCRA/TSCA Permits Section

U.S. EPA Region 5

(312) 353-9317

(312) 582-5190 - fax

From: Mitsakopoulos, Greg
Sent: Wednesday, November 06, 2013 4:23 PM
To: Ramaly, Todd; Downey, Shannon; Breslin, Colin; Lambesis, Christopher
Cc: Swan, Kathleen; Awanya, Francis; Schupp, George; Argentieri, Sabrina; Kane, Eleanor
Subject: RE: Veolia 1310005

Todd, thanks for the info. Do you have an idea of what these are?:

VS2-Pb-13B-Grab1 ("10-80% Pb"; is it actually soil?) **(1310005-05)**

This is a spike compound used to add lead to the test burn. It is a solid matrix of a chemical compound, not soil.

VS2-Cr-13B-Grab2 ("10-80% Cr"; is it actually aqueous?) **(1310005-06)**

This is also a spike compound used to add chromium to the test burn. I believe it is aqueous.

Our Sample Coordinator was unable to read pH by test-strip for the VS2-Cr sample. I'll remark that CRL's chromium standard is very dark blue at a concentration of 1%. So if VS2, nominally 10-80% Cr, is not at least as dark, in my opinion, it is not that concentration. This is having not seen the sample myself, however.

VS2-Cr-13B-Grab2 is a concentrated solution that will probably be very acidic.

Next to your minimum target RLs for As, Be, Cd, Cr, and Pb, I've listed CRL's ICP-AES RLs in green for the best-case-no-dilution scenario. Even then, for aqueous samples, our RL > target RL for As and Pb, and for soil/organic samples, our RL > target RL for As. Any dilutions needed will more than likely raise the remaining RLs beyond the target RLs.

Your RLs are fine.

Also, it won't be possible to measure trace analytes at the target RLs against a backdrop of percent-level Cr and Pb, because of the need to dilute heavily to protect our trace-level instruments, and possible interelement interferences.

Please note that, per the COC, VS2-Cr-13B-Grab2 (the Cr spike) need only be analyzed for Chromium.

Similarly, VS2-Pb-13B-Grab1 (the Pb spike) need only be analyzed for lead.

Also, the three mercury spike samples, VS2-HG-13B-Grab2, VS3-HG-13B-Grab3, and VS4-HG-11B-GRAB1, need only be analyzed for mercury.

Thus, the relatively high concentrations in these samples will not negatively impact any other analysis.

Furthermore, just to be clear, the aforementioned 5 spike samples should be the only samples at percent levels.

So, knowing what we know about the 14 non-spike samples, we don't expect to see NDs with elevated detection limits due to dilutions unrelated to matrix interference.

Colin, Francis, and Kathleen: I've cross-referenced our LIMS IDs in green next to our clients' field descriptors.

Thanks,

Greg

From: Ramaly, Todd
Sent: Wednesday, November 06, 2013 12:28 PM
To: Downey, Shannon; Breslin, Colin; Lambesis, Christopher
Cc: Mitsakopoulos, Greg; Swan, Kathleen; Awanya, Francis; Schupp, George; Argentieri, Sabrina; Kane, Eleanor
Subject: RE: Veolia 1310005

Hi all,

Chris and I have prepared responses to your questions below (**marked in Red).** Please let us know if you have any other questions.

Todd D. Ramaly

Environmental Scientist

RCRA/TSCA Permits Section

U.S. EPA Region 5

(312) 353-9317

(312) 582-5190 - fax

From: Downey, Shannon
Sent: Monday, November 04, 2013 4:13 PM
To: Breslin, Colin; Ramaly, Todd; Lambesis, Christopher
Cc: Mitsakopoulos, Greg; Swan, Kathleen; Awanya, Francis; Schupp, George; Argentieri, Sabrina; Kane, Eleanor
Subject: RE: Veolia 1310005

Colin, Greg, et al,

I have attached the profiles of the waste that the company submitted to us. These are basically summaries of the different wastes that were blended together during the CPT. They should hopefully answer most of your questions, except the density. I need to get back to you on that. I do not know the proportions that these were added/mixed, but could potentially find out if you needed me to.

With regards to your question about what limits to use, you are correct that we are looking at the MACT. I have included a searchable version of that as well for you to reference.

Let me know if you have additional questions. I will do my best to answer them. Sorry I didn't get back to you sooner. I was out of the office last week, and was unable to turn on my out of

office notification.

Shannon Downey
Environmental Engineer
Air Enforcement & Compliance Assurance Branch
U.S. Environmental Protection Agency, Region 5, (AE-17J)
77 W. Jackson Blvd
Chicago, IL 60604

Tel: (312) 353-2151
Fax: (312) 385-5398

From: Breslin, Colin
Sent: Wednesday, October 30, 2013 9:14 AM
To: Ramaly, Todd; Lambesis, Christopher; Downey, Shannon
Cc: Mitsakopoulos, Greg; Swan, Kathleen; Awanya, Francis; Schupp, George
Subject: FW: Veolia 1310005

Hello,

We have begun work on the Veolia samples, and they are definitely interesting. Can you please provide as many answers as possible to Greg Mitsakopoulos' questions below? I am working on the mercury analysis and have a few of the same questions. It will greatly help our analytical work.

In regards to the mercury analysis. I began preparing all of the liquid samples with our water SOP. The samples designated as mercury spikes can be analyzed by the water SOP, but based on my preparation observations of the other liquid samples (which I'm presuming are all non-aqeous) I will not be able to use the mercury water SOP. My next attempt will be to perform the analysis by the soil SOP, which will use ~0.5 g of liquid. Without knowing the liquid density the reporting units will be mg/kg. As in Greg's question below, are units of mg/kg acceptable or does the density need to be determined for units of mg/L?

Yes, mg/kg units are acceptable. Please note that the LowBtu samples are aqueous (see responses below).

Please let us know, thanks,

Colin Breslin

Chemist & Acting Sample Coordinator

U.S. EPA Chicago Regional Lab

536 S. Clark St. (ML-10C)

Chicago, IL 60605

312-886-2912

From: Mitsakopoulos, Greg
Sent: Tuesday, October 29, 2013 2:55 PM
To: Breslin, Colin
Cc: Swan, Kathleen; Awanya, Francis
Subject: Veolia 1310005

Colin,

Can you ask our client:

Any information they can furnish regarding the make-up of the solid samples and the liquid samples would be most helpful. I don't believe this info. is in the QAPP or SAP.

*Which of the liquids are aqueous?

10/23/2013-VeoliaS4-Metals-LBTU **(1310005-12)**

10/23/2013-VeoliaS4-DF-LBTU **(1310005-17)**

Which are mostly organic?

10/10/2013 – VS2-HBW-13B-COMP2C **(1310005-03)**

10/17/2013 – VS3-HBW-13B-COMP2C **(1310005-04)**

10/23/2013 – VeoliaS4-Metals-HBTU **(1310005-11)**

10/23/2013 – VeoliaS4-Metals-SCC **(1310005-10)**

10/23/2013 – VeoliaS4-DF-HBTU **(1310005-16)**

10/23/2013 – VeoliaS4-DF-SCC **(1310005-15)**

Are some of them "Previcur", as noted in the meeting?

All of the "mostly organic" liquids are mixtures of wastes. One of the wastes in the mixture may contain 0-5% propamacarb.

*Are the soils actually soil?

The following are all soils:

10/10/2013-Vs2-CS-13B-Comp2C **(1310005-01)**

10/17/2013-VS3-CS-13B-Comp2C **(1310005-02)**

10/23/2013- VeoliaS4-Metals-Box **(1310005-13)**

10/23/2013- VeoliaS4-DF-Box **(1310005-18)**

The following are soils mixed with a clay-like mineral product:

10/23/2013- VeoliaS4-Metals-Pit **(1310005-14)**

10/23/2013- VeoliaS4-DF-Pit **(1310005-19)**

*I appreciated the "high Cr" and "high Pb" notations, but is there any idea of their approximate level- are we talking percent-level, or ppm-level?

Both are percent-level, between 10-80%

*Are any other remarks available?

No.

*Mention that Metals Group plans on using our regular METALS025 hotblock technique on samples that are actually aqueous. We plan to proceed as requested on the organic samples to digest with METALS034/ 3050B hotplate & beaker.

What are the desired reporting units for the liquid samples? We'd need to acquire the density to convert client-requested liquids-digested-as-solids from mg/kg to ppm.

If you normally report liquids as mg/L or ug/L, could you also perform density so that we may convert the results?

What are the desired analytes and reporting limits?

NOTE: ALL SOIL/SOLID SAMPLES MUST BE REPORTED ON AN AS-RECEIVED (a.k.a. WET-WEIGHT) BASIS

Minimum target RLs. Lower RLs are encouraged. **(CRL METALS003 and 004 RLs; best-case)**

Analyte	Aqueous (ug/L)	Soils/Organics (mg/kg)
As	20 **(40; MDL 6)**	2.0 **(4; MDL 0.8)**
Be	10 **(2)**	1.0 **(0.1)**
Cd	5.0 **(2)**	0.5 **(0.2)**
Cr	10 **(5)**	1.0 **(0.5)**
Pb	15 **(30; MDL 6)**	2.0 **(1.5)**
Hg	0.2	0.020

We will do our best to meet them, subject to the 0.5 g -> 50 mL implicit in the client-requested 3050B digestion, and the need for us to protect our instruments. We were told at the planning meeting that As, Be, Cd, Cr and Pb were desired, and that desired reporting limits would follow. I don't believe this info. in the QAPP or SAP. The QAPP makes mention of the Clean Air Act

Maximum Available Control Technology (CAA MACT). Perhaps that's the reference that we are to use? **See above.**

Thanks,

Greg

Greg Mitsakopoulos

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